

**SPECIFICATION:**

*Note: Additions are marked by underline, deletions are marked by brackets [ ].*

Title: Replace with following new title: Method of Organizing and Accessing Chinese Words [Method and Apparatus for on Screen Vocabulary for Chinese Language Word Processing]

Page 1, first paragraph, replace with the following new paragraph:

The present invention organizes [splits] all available Chinese words into two storage structures [divisions], the traditional [division] and the simplified [division]. The two structures [divisions] are in a three dimensional format [structure], parallelly collocated, consisting three vocabulary tiers. Each tier has 26 pages for 26 word groups. Each page is divided into a plurality of cells [addresses], each cell [address] is occupied by one word. Each cell is assigned with an individualized address. For the reason that the traditional structure [division] and the simplified structure [division] are symmetrical, each cell [address] with its occupant and the associating address in a structure [division] is correspondingly the equivalent to the same cell [address], same occupant and same address in the opposite structure [division].

Page 1, second paragraph, third line, correct spelling error of "subordinate".

Page 2, third paragraph, replace with the following new paragraph:

Unless the user selects other tiers, the program defaults to the primary tier<sup>122</sup>, where contains the most frequently used words. Pages are indexed with alphabet letters on the keyboard, as one of the efforts of this invention to use existing equipment. From a to z, use the lower case, for the simplified form Chinese words; use the upper capital case A to Z for the traditional form Chinese words. On the primary and secondary tiers, each page has 100 words; pages on the supplemental

tier, each may contain more than 100 words. The primary tier in a division may contain over 2500 words. For a normal daily written communication, this is adequate. The supplemental tier contains the least frequently used words. From other angle of view, each page, indexed by one alphabet letter, gathered words sharing related meanings [one dominant meaning], includes three tiers, from the most frequently used word tier to the least frequently used word tier.

Page 2, fourth paragraph, replace with the following new paragraph:

Step131 represents all 26 pages of the most frequently used words, to select between the pages, the user taps the alphabet letter keys on the keyboard with one hand and to select the words using the mouse with another hand. Every cell with a word therein [in a page] is assigned with an address. For 100 words on one page, a two digit number is enough, one number of the column and one number of the row, is easy to handle. A word is addressed by the page alphabet and the column and row numbers thereof. When this process is familiarized by the user, who may key in the addresses to copy the words to the word processor, no need to display the pages on the screen. If a voice device is equipped, the user may call in the address for the word.

Page 3, second paragraph, replace with the following new paragraph:

Pages within a tier is coplanar. Tiers are used for ranking words usage priorities, [classification only, to arrange words] from the most frequently used to the least frequently used. Switching between the tiers is done by using the up/down keys on the keyboard. Groups are for arranging related meaning words, indexed from a to z. [Tiers are for indexing only. Words are contained in pages. Words under one dominant meaning (more explanation given in Fig.3), or under one other dominant

fact (radicals or strokes) are indexed by one alphabet letter. Words under one dominant meaning, or under one other dominant fact are classified into one groups arranged into three tiers as mentioned above.] If a desired word is not in the primary tier[page], "page down" to the same group on the second tier, or further "page down" to the same group on the supplemental tier. The three tiers are not coplanar.

Page 4, third paragraph, replace with the following new paragraph:

Fig.2, illustrates the home page 200, showing [wherein] the traditional [division] 210 and the simplified [division] 220 are identical in their format. [structure, containing same number of tiers, pages and addresses in exact same location; each word occupying the associated address in onedivision is the same word equivalent in the exact same address in the opposite division.]

Page 4, fourth paragraph(extends to page5), replace with the following new paragraph:

To find the equivalent word in the opposite division, a user types in the address of the word, changes its capital form with the "Shift + Caps" keys. Or from this home page, selecting the page where the word located, a user returns to the home page to shift to the opposite structure[division] to find the equivalent word. [The traditional form is used in Taiwan, Hong Kong and most oversea areas, the simplified form is used in the mainland China, Singapore and some other Asian countries. Due to a long period of isolation, people] People, who is familiar with one form of words has difficulty to recognize words in the opposite form. Dictionaries usually list all the available words indiscriminatory, commingle words of these two forms. Other Chinese word processing programs are having all Chinese words mixed. [From a common knowledge, for] For communicating formally in written language,

to keep all words in an unified form is a good manner. The present invention offers the separation of these two forms. But finding the equivalent word is easy with this cross reference tool.

Page 5, second paragraph, replace with the following new paragraph:

Within the areas of 210 or 220, three choices: default, second, supplement are listed for direct access to these three tiers. Without making the selections, the program automatically is in the default seting for the primary tier of vocabulary. Area 230 is a matrix of 27 keys for the index of the word pages, offering direct access to the word pages by pointing the cursor and click on them. [Again, the] The default seting is for the primary words. [It changes to other two tiers when selected.] The 26 keys are indexed by the English alphabet letters on the keyboard, leaving the last one blank for additional expansion.

Page 5, third paragraph(extends to page6), replace with the following new paragraph:

To index the Chinese words for listing intelligently, for searching easily, is always a very challenging task for centuries. Until the present time, there is no perminant best solution for every one to satisfy[accept it]. A principle of this invention is to utilize the existing equipment of a common personal computer, to use the 26 English letters for the indexing seems to be convenient. To classify the thousands of Chinese words into 26 groups, the best way seems to be gathering the words by their related meanings[dominant meanings]. The present invention classifies the word meanings into 23 groups led by letters from A to W, uses X,Y,Z for words difficult to classify, for special words and some very basic words. The words are arranged into these 23 groups by [their dominant meanings of] most basic elements of the universe; such as sun, moon, sky; earth, rock; domestic

mammal; fish, water, boat; human, male, female; metal, tool, knife; measurement system; wood, bamboo...A person needs only a basic knowledge of these elements to directly look into the related page to locate the desired Chinese words. [Words under one dominant meaning are gathered in one group, indexed by one letter, divided to three tiers.] The primary tier has [100] most frequently used words, in most occasions, these words are sufficient. This primary tier is the default setting. The second tier has [100] less important words. The supplemental tier contains all words that are not listed in the other two higher priority tiers. This tier has no limit for listing. New words are added or created. Words may be relocated from other two tiers to this tier, or move out of. For the reason of no limit for word listing, the individual address in this tier is no limit to a two digit number. A modern Chinese word processor, such as the Microsoft Windows 98, has the ability to create new words. This invention is intended to be a feature of a Chinese word processor. A modern Chinese word processor further offers a function of associated compound word, [immediately after] when a single word is [in] entered. The punctuation marks are arranged as well.

Page 6, second paragraph, replace with the following new paragraph:

Area 240 is a key leading to a detailed listing of all the pages. A new user will find it very handy to look up the indexes with all the word meaning groups as well as radicals ["dominant meanings"] they carry. It is shown in Fig. 1 as step 121. Area 250 is a key leading to the word relocation process, detail given in Fig. 5.

Page 6, third paragraph (extends to page 7), replace with the following new paragraph:

Fig. 3 is a typical word processor display 300, with an inset window 310. Showing here is a page in the default tier of 100 primary words of the [under the dominant

meaning of] domestic mammals. Bar 311 is for a cursor to be landed and drag the inset window 310 to any location to yield the main window for word processing. The inset window 310 is floating automatically as the typing in progress. Four keys 312 are for the purpose of the following: (h) key for returning to home page, (+) key for enlargement of the inset window 310, (-) key for reduction of it, (x) key for cancelling it.

Page 7, third paragraph, replace with the following new paragraph:

Words on this page are all related to [The dominant meaning of this page is] domestic mammals, includes: sheep, dog, pig, horse, cow, cat, rat, elephant and camel. Words listed here are either direct relatives of these mammals, such as "fox" and "wolf" are listed with "dog"; or words derived from these mammals, such as "drive" is listed with "horse", "plough" is with "cow". [Due to the page limitation, "tiger" is not listed here with "cat". There is another group for wild mammals.] Interestingly, "monky" is here for the reason that it has the "dog" radical. In another page of "water, fish and boat", one will find that "whale" is listed for the same reason of having the "fish" radical, the ancient Chinese created this word long before the modern bio-science discovered that whale was not a fish. But whale lives with fish in water.

Page 7, fifth and sixth paragraph (extends to page 8), replace with the following new paragraph:

The word occupies the address 11 (the one at the top left corner) is "oxygen". Listed here for the reason of having same pronunciation of "sheep", having the radical of "sheep". For the reason of having a co-radical of "air", it will be listed again in the page of "air, weather, atmosphere". For the reason of being a

frequently used word, it will be listed in another primary page as well. This multiple listing of words is one of the main novelty of this invention contrast to traditional Chinese dictionaries and word processing programs. Words have no limit to be listed any number of times and any where within their form structure according to the desire and willingness of the user. [A language is a major part of a culture. It may not be logical. A user of this program, knowing Chinese language, will find no problem to locate words. Again, some words may be listed in more than one groups.]

Page 8, third paragraph, replace with the following new paragraph:

Fig.4 illustrates the complete word organization 400 having two structure branches, the traditional 410 and the simplified 460 [structure of the vocabulary arrangement. Block 400 indicates the Chinese words splited to two divisions: the traditional division 410 and the simplified division 460. Again, these two divisions are identical from the entire structure to every individual address setting]. Every pair of corresponding components on these two structure branches is symmetrically collocated. [Each pair of the two equivalent words of the two forms is located in the corresponding addresses of the two divisions.] This arrangement gives the user a very easy way to find the corresponding word in the opposite form.

Page 8, fifth paragraph(extends to page9), replace with the following new paragraph:

These tiers are not coplanar, but vertically arranged. A bridge 478 crosses from block 471 to block 481 indicates that words may be relocated between them. A bridge 489 crosses from block 481 to block 491 indicates that words may be relocated between them. A bridge 479 crosses from block 471 to block 491 indicates that words may be relocated between them.

Page 9, second paragraph, replace with the following new paragraph:

The simplified structure's [division] components are indexed with lower case of letters a to z. For the reason of being identical to each other, the traditional structure [division] has same number of blocks and bridges as the simplified. [division.] The default tier and pages are 420 and 421. The second tier and pages are 430 and 431. The supplement tier and pages are 440 and 441. The bridges cross them are 423, 434, 424.

Page 9, third paragraph, replace with the following new paragraph:

For cross reference between the [of the vocabulary of the] two structure branches [word form divisions], bridges are arranged. For the reason of corresponding location of the equivalent words, bridges across the corresponding addresses in the corresponding pages only. That is a bridge across between two same alphabet letter indexed pages only (one page indexed with the upper case letter, the other page with the lower case letter) in a same level of tier.

Page 9, fourth paragraph, replace with the following new paragraph:

On Fig.4, bridge 427 crosses the pages 421 and 471 for the tiers 420 and 470; bridge 438 crosses the pages 431 and 481 for the tiers 430 and 480; bridge 449 crosses the pages 441 and 491 for the tiers 440 nd 490. Again, for the reason of being correspondingly equivalent of the addresses and its occupants(words) in these two structures [divisions]; if a word in one structure [division] is relocated from one tier to another, the equivalent word in the other division will be relocated automatically to comply with this principle.